

L45 264978 SEA FILE=MEDLINE ABB=ON PLU=ON (CANIDAE/CT OR B1.50.150.9  
00.649.147.153./CT)  
L49 12296 SEA FILE=MEDLINE ABB=ON PLU=ON (MYCOPLASMA/CT OR  
B3.440.560.580.553.553./CT)  
L50 242 SEA FILE=MEDLINE ABB=ON PLU=ON L49 AND (L41 OR L42)  
L51 0 SEA FILE=MEDLINE ABB=ON PLU=ON L50 AND (L44 OR L45)

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIX, JAPIO, PASCAL,  
DISSABS, CABA, AGRICOLA, VETU, VETB' ENTERED AT 10:50:43 ON 06 MAY  
2010)

L52 789 S "BROWNLIE J"?/AU  
L53 91 S "CHALKER V"?/AU  
L54 93 S "ERLES K"?/AU  
L55 5 S L52 AND L53 AND L54  
L56 91 S L52 AND (L53 OR L54)  
L57 9 S L53 AND L54  
L58 6 S (L52-L54 OR L56) AND L17  
L59 8 S (L52-L54 OR L56) AND L14  
L60 18 S L55 OR L57-L59  
L61 7 DUP REM L60 (11 DUPLICATES REMOVED)

L61 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2009:316615 HCAPLUS Full-text

DOCUMENT NUMBER: 151:418689

TITLE: Strain typing of *Mycoplasma cynos* isolates from  
dogs with respiratory disease

AUTHOR(S): Mannerling, Sally A.; McAuliffe, Laura; Lawes,  
Joanna R.; Erles, Kerstin;  
Brownlie, Joe

CORPORATE SOURCE: The Royal Veterinary College, Hatfield, AL9 7TA,  
UK

SOURCE: Veterinary Microbiology (2009), 135(3-4), 292-296  
CODEN: VMICDQ; ISSN: 0378-1135

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The association of *Mycoplasma cynos* with canine infectious respiratory disease is increasingly being recognized. This study describes the strain typing of 14 *M. cynos* isolates cultured from trachea and bronchoalveolar lavage samples of six dogs with respiratory disease, from two sep. kennels in the United Kingdom. The genetic similarity of the isolates was investigated using pulsed-field gel electrophoresis (PFGE) and random amplified polymorphic DNA (RAPD). Most of the isolates from four dogs housed at a re-homing kennel were genetically similar and some isolates from different dogs were indistinguishable by both PFGE and RAPD. These isolates were cultured from dogs with non-overlapping stays in the kennel, which may indicate maintenance of some strains within kennels. A small number of isolates showed much greater genetic heterogeneity and were genetically distinct from the main group of *M. cynos* strains. There was also a high degree of similarity of the *M. cynos* type strain (isolated from a dog with respiratory disease in Denmark in 1971) to at least one of the United Kingdom isolates using PFGE anal., which may suggest possible conservation of pathogenic strains of *M. cynos*.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
RE FORMAT

L61 ANSWER 2 OF 7 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights  
reserved on STN DUPLICATE 2

ACCESSION NUMBER: 2007076462 EMBASE Full-text

TITLE: Serological evidence of *Mycoplasma cynos* infection in

AUTHOR: canine infectious respiratory disease.  
 Rycroft, Andrew N. (correspondence); Tsounakou,  
 Elizabeth; Chalker, Victoria  
 CORPORATE SOURCE: Department of Pathology and Infectious Diseases, Royal  
 Veterinary College, Hawkshead Lane, North Mymms, Herts  
 AL9 7TA, United Kingdom. [arycroft@rvc.ac.uk](mailto:arycroft@rvc.ac.uk)  
 SOURCE: Veterinary Microbiology, (10 Mar 2007) Vol. 120, No.  
 3-4, pp. 358-362.  
 Refs: 24  
 ISSN: 0378-1135 CODEN: VMICDQ  
 PUBLISHER IDENT.: S 0378-1135(06)00458-5  
 COUNTRY: Netherlands  
 DOCUMENT TYPE: Journal; Article  
 FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and  
 Tuberculosis  
 004 Microbiology: Bacteriology, Mycology,  
 Parasitology and Virology  
 005 General Pathology and Pathological Anatomy  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English  
 ENTRY DATE: Entered STN: 13 Mar 2007  
 Last Updated on STN: 13 Mar 2007  
 AB A high proportion of dogs suffer from respiratory disease when they are placed  
 in kennels for vacation or re-homing. The role of *Mycoplasma cynos* as an  
 initiating agent in canine infectious respiratory disease was investigated by  
 examining the serological response of dogs to this organism at the time of  
 entry into a large re-homing kennel. Forty-two paired serum samples from dogs  
 (21-day interval) were examined for antibody to *M. cynos* using Western  
 blotting. The development of antibody in the serum was related to clinical  
 disease recorded over the same period. Sixty seven per cent of the dogs  
 showed a two-fold or greater rise in antibody to *M. cynos* during the first 3  
 weeks in the kennel. Reactivity with a 45 kDa antigen was dominant. Of those  
 showing a positive serological reaction, 80% had recorded clinical respiratory  
 disease while 20% remained healthy. The findings of this study show that an  
 antibody response to *M. cynos* is common in dogs entering the re-homing kennel  
 and is positively related to the development of clinical respiratory disease.  
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L61 ANSWER 3 OF 7 HCPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 3  
 ACCESSION NUMBER: 2005:29227 HCPLUS Full-text  
 DOCUMENT NUMBER: 142:133045  
 TITLE: Vaccines comprising attenuated viruses and  
 bacteria or antigen-encoding nucleic acids and  
 antibodies for treating canine infectious  
 respiratory disease  
 INVENTOR(S): Brownlie, John; Chalker, Victoria  
 Jane; Erles, Kerstin  
 PATENT ASSIGNEE(S): The Royal Veterinary College, UK  
 SOURCE: PCT Int. Appl., 102 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005002618	A1	20050113	WO 2004-GB2865	20040701
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,				

CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004253344	A1	20050113	AU 2004-253344	20040701
CA 2530797	A1	20050113	CA 2004-2530797	20040701
EP 1638599	A1	20060329	EP 2004-743211	20040701
EP 1638599	B1	20090916		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
BR 2004012194	A	20060822	BR 2004-12194	20040701
CN 1845754	A	20061011	CN 2004-80025001	20040701
JP 2007526884	T	20070920	JP 2006-518335	20040701
EP 2050463	A2	20090422	EP 2008-75914	20040701
EP 2050463	A3	20100120		
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, HR, LT, LV, MK				
NZ 544453	A	20090430	NZ 2004-544453	20040701
AT 442857	T	20091015	AT 2004-743211	20040701
NO 2005006207	A	20060131	NO 2005-6207	20051227
IN 2005DN06133	A	20071221	IN 2005-DN6133	20051229
KR 2006106809	A	20061012	KR 2006-700080	20060102
MX 2006000278	A	20060407	MX 2006-278	20060105
ZA 2006000918	A	20070725	ZA 2006-918	20060131
US 20070098739	A1	20070503	US 2006-563199	20060901
US 20080220018	A1	20080911	US 2007-849931	20070904
PRIORITY APPLN. INFO.:			GB 2003-15323	A 20030701
			EP 2004-743211	A3 20040701
			WO 2004-GB2865	W 20040701
			US 2006-563199	A3 20060901

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A vaccine composition for vaccinating dogs comprising any one or more of (a) an agent capable of raising an immune response against *Streptococcus equi* sub species *zooepidemicus* in a dog, (b) an agent capable of raising an immune response against *Mycoplasma cynos* in a dog, and (c) an agent capable of raising an immune response against a *Chlamydophila* in a dog.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2004:101304 HCAPLUS Full-text

DOCUMENT NUMBER: 140:162357

TITLE: Canine respiratory coronavirus (CRCV) spike protein, polymerase and hemagglutinin/esterase

gene and use thereof in diagnosis of and vaccine preparation against canine infectious respiratory disease

INVENTOR(S): Brownlie, John; Chalker, Victoria

Jane; Erles, Kerstin

PATENT ASSIGNEE(S): The Royal Veterinary College, UK

SOURCE: PCT Int. Appl., 150 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004011651	A1	20040205	WO 2003-GB2832	20030701
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2492333	A1	20040205	CA 2003-2492333	20030701
AU 2003244822	A1	20040216	AU 2003-244822	20030701
AU 2003244822	B2	20090129		
EP 1525313	A1	20050427	EP 2003-738299	20030701
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005533513	T	20051110	JP 2004-523905	20030701
NZ 537778	A	20080430	NZ 2003-537778	20030701
NZ 556442	A	20090331	NZ 2003-556442	20030701
EP 2182066	A2	20100505	EP 2009-75521	20030701
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR, AL, LT, LV, MK				
MX 2005001098	A	20050908	MX 2005-1098	20050127
NO 2005000979	A	20050425	NO 2005-979	20050223
US 20070248616	A1	20071025	US 2006-522513	20060622
US 20090081780	A1	20090326	US 2008-239527	20080926
PRIORITY APPLN. INFO.:			GB 2002-17434	A 20020727
			EP 2003-738299	A3 20030701
			NZ 2003-537778	A3 20030701
			WO 2003-GB2832	W 20030701
			US 2006-522513	A3 20060622

#### ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to a novel coronavirus, canine respiratory coronavirus (CRCV) identified from the respiratory tract kennelled dogs with canine infectious respiratory disease (CIRD). CRCV has a low level of homol. to the enteric canine coronavirus, but which has a high level of homol. to all bovine coronavirus strains (eg. Quebec and LY138) and human coronavirus strain OC43. Also

provided are amino acids specific to the CRCV polymerase, S protein and HE that are not present in the BCV, HCV and HEV S proteins. Serol. anal. also show that the presence of antibodies against CRCV on the day of entry into the kennel decreases the risk of developing respiratory disease. The CRCV spike, polymerase and hemagglutinin/esterase cDNA and protein partial sequences are listed in Figures (1) to (4), (13) and (14). CRCV might be useful to prepare vaccines against CIRD caused by CRCV as well as other causative agents.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 5  
 ACCESSION NUMBER: 2004:908070 HCAPLUS Full-text  
 DOCUMENT NUMBER: 142:130661  
 TITLE: Mycoplasmas associated with canine infectious respiratory disease  
 AUTHOR(S): Chalker, Victoria J.; Owen, Wanda M. A.; Paterson, Caren; Barker, Emily; Brooks, Harriet; Rycroft, Andrew N.; Brownlie, Joe  
 CORPORATE SOURCE: Department of Pathology and Infectious Diseases, Royal Veterinary College (RVC), University of London, North Mymms, AL9 7TA, UK  
 SOURCE: Microbiology (Reading, United Kingdom) (2004), 150(10), 3491-3497  
 CODEN: MROBEO; ISSN: 1350-0872  
 PUBLISHER: Society for General Microbiology  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Canine infectious respiratory disease (CIRD) is a complex infection that occurs worldwide predominantly in kennelled dogs, and several bacterial and viral microorganisms have been associated with outbreaks of CIRD. However, few studies have comprehensively examined the species of mycoplasma present in healthy dogs and those with CIRD. As part of an extensive study investigating the microorganisms involved in CIRD, the species of mycoplasma present throughout the respiratory tract of dogs with and without CIRD were determined. Mycoplasmas were cultured from tonsillar, tracheal and bronchial lavage samples, and identified to the species level by PCR and sequencing. *Mycoplasma cynos* was demonstrated on the ciliated tracheal epithelium by *in situ* hybridization and was the only mollicute found to be associated with CIRD, but only in the lower respiratory tract. Isolation of *M. cynos* was correlated with an increased severity of CIRD, younger age and a longer time in the kennel.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 6 OF 7 MEDLINE on STN DUPLICATE 6  
 ACCESSION NUMBER: 2004292256 MEDLINE Full-text  
 DOCUMENT NUMBER: PubMed ID: 15193070  
 TITLE: Prevalence of *Mycoplasma agassizii* and Chelonian herpesvirus in captive tortoises (*Testudo* sp.) in the United Kingdom.  
 AUTHOR: Soares Jorge F; Chalker Victoria J; Erles Kerstin; Holtby Sonya; Waters Michael; McArthur Stuart  
 CORPORATE SOURCE: Department of Pathology and Infectious Diseases, Royal Veterinary College, Hawkshead Lane, North Mymms,

SOURCE: Hertfordshire AL9 7TA, United Kingdom.  
 Journal of zoo and wildlife medicine : official publication of the American Association of Zoo Veterinarians, (2004 Mar) Vol. 35, No. 1, pp. 25-33.  
 Journal code: 8915208. ISSN: 1042-7260. L-ISSN: 1042-7260.

PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200411  
 ENTRY DATE: Entered STN: 15 Jun 2004  
 Last Updated on STN: 6 Nov 2004  
 Entered Medline: 6 Nov 2004

AB During the months of April to August in 1999 and 2002, oral swabs were collected from 146 tortoises (*Testudo* sp.) in private collections in the United Kingdom and tested by polymerase chain reaction (PCR) for the presence of *Mycoplasma agassizii* and Chelonian herpesvirus (ChHV). The presence of *M. agassizii* was confirmed by restriction digestion of the PCR product. A 307-bp fragment of the ChHV UL5 homologue gene was sequenced and found to show most similarity to equine herpesvirus type 1. A prevalence of 15.8 and 8.2% was found for *M. agassizii* and ChHV, respectively. Comparison of the carriage of both *M. agassizii* and ChHV in different species of tortoises correlated the presence of *M. agassizii* with *Testudo horsfieldii* and ChHV with *Testudo marginata* and *Testudo graeca iberia*. An association of ChHV with stomatitis was also found. Mixed infections with both agents were detected. The findings further demonstrate this pathogen-tortoise association and the cross transmission of these infections if different tortoise species are housed together.

L61 ANSWER 7 OF 7 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN  
 ACCESSION NUMBER: 2002:212345 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV200200212345  
 TITLE: The role of Mycoplasmas in infectious canine tracheobronchitis.  
 AUTHOR(S): Chalker, V. J. [Reprint author]; Toomey, C. [Reprint author]; Eyles, K. [Reprint author]; Brooks, H. [Reprint author]; Opperman, S. [Reprint author]; Rycroft, A. [Reprint author]; Brownlie, J. [Reprint author]  
 CORPORATE SOURCE: Royal Veterinary College, Hatfield, Hertfordshire, UK  
 SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (2001) Vol. 101, pp. 392. print.  
 Meeting Info.: 101st General Meeting of the American Society for Microbiology. Orlando, FL, USA. May 20-24, 2001. American Society of Microbiology.  
 ISSN: 1060-2011.  
 DOCUMENT TYPE: Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 27 Mar 2002  
 Last Updated on STN: 27 Mar 2002

AB Infectious canine tracheobronchitis (ICT, kennel cough) is a major problem in kennelled dogs world-wide, particularly when dogs are housed in a high density environment. The disease process begins with mild nasal discharge and coughing, but can develop and lead to severe depression, secondary infection,

and in some cases even death. The causative agents of ICT have never been accurately determined and infection is thought to occur as a complex of several infectious agents, including *Bordetella bronchiseptica* and Canine Parainfluenza Virus. The precise role of *Mycoplasma* species in the aetiology of canine respiratory disease has never been characterised. In collaboration with a well-established kennel (apprx3000 animals) with a history of severe and recurrent ICT, we sought to evaluate which *Mycoplasma* species were present in both the upper and lower canine respiratory tract. Analysis of clinically normal dogs and those in all stages of respiratory disease led to the discovery that a large number of *Mycoplasma* species are present in the canine respiratory tract, and that total *Mycoplasma* load increases with increasing disease severity. Isolates were initially grouped with RAPD analysis and then further characterised by sequencing of the 16S rRNA gene concurrent with growth inhibition testing. In addition, we correlate the presence of *Mycoplasmas* to ICT disease severity and clinical manifestations.

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